17th International Emission Inventory Conference

"Inventory Evolution – Portal to Improved Air Quality"

Courses June 2, 2008
Conference June 3-5, 2008
Portland, Oregon – Doubletree Hotel

Sponsored by:
Emission Inventory and Analysis Group
Air Quality Assessment Division
Office of Air Quality Planning and Standards

Welcome to the 17th Annual Emissions Inventory Conference

The US Environmental Protection Agency (EPA) looks forward to your participation in the 17th Annual Emissions Inventory Conference in Portland Oregon June 2-5, 2008. This year's Conference theme emphasizes the evolving uses of the emissions inventory, the motivation of those uses, and the impact those uses have on emissions data development.

Training courses on different aspects of inventory preparation and use will be held on Monday June 2. After the training day on Monday, the general Conference will open with a Plenary Session for all Conference attendees on the morning of Tuesday June 3. The plenary will include a welcome by the US EPA and local hosts, and a report from the US EPA Emissions Inventory and Analysis Group followed by a panel of speakers. Chet Wayland, Director of the Air Quality and Assessment Division of the EPA's Office of Air Quality Planning and Standards (OAQPS) will serve as moderator for the panel. The speakers assembled for the panel represent the perspective of the regulated community regarding the role of proper emissions characterization in implementing air quality programs. We have highlighted some evolving air quality program areas that rely on good emissions inventory data, and which focus on health and air quality improvements on a local, regional, and global scale:

- o Local attainment of the PM NAAQS (National Ambient Air Quality Standard for Particulate Matter);
- o National mitigation / reduction of residual risks from air toxics; and
- o Global adaptation to climate change and reduction of greenhouse gas emissions.

The following industry representatives will share their perspectives with us:

Local scale - (PM) NAAQS
John Crouch, Director of Public Affairs - Hearth, Patio and Barbecue Association
    Focus: Woodstove change-out program in the mid and northwest United States and influence of proper emissions characterization in developing sector strategies for emission reduction.

Regional / national scale - residual risk reduction for toxic air emissions
Jan L. Laughlin, Regulatory Issues Coordinator - Air, Health, Safety & Environment - Conoco Phillips
    Focus: US EPA's Residual Risk and Technology Rule (RTR) and importance of proper emission characterization in targeting emission reduction programs.

Global scale - GHG emissions
Jeff C. Muffat, Manager Environmental Regulatory Affairs - 3M
    Focus: the importance of proper GHG emissions characterization and the role of corporate operations – domestic and global, in understanding carbon footprint.

Following the Plenary, the technical sessions will commence on Tuesday afternoon. Many of the technical sessions are similar to those from earlier years and others continue to evolve in response to changing program needs. A few of the sessions will include some focused panel discussions and should provide a nice integration of practical field experiences.

On Tuesday evening, we will have a Poster Session and Exhibitor Reception from 6:00 – 8:00 pm. Attending the reception is a great way to connect with other conference attendees and to discuss your air quality program needs with several exhibitors. We have a very interesting lineup of poster presentations and the authors will be available to explain their work and answer your questions. As we did last year, we intend to mix fun with work by offering attendees the opportunity to vote for the posters of their choice and award prizes to the winners so please stop by and participate.

We also trying something new this year by hosting an emissions inventory 'software showcase'. The showcase is for both private sector software developers and public entities to demonstrate their wares to Conference attendees. Federal, state, local, and tribal agency staff as well as consultants will showcase their efforts with you regarding development and application of emissions inventory related software. We hope the showcase will lead to a sharing of ideas and solutions among those involved in developing and using software for emissions inventory applications. Demonstrations will be available throughout the day Tuesday and Wednesday. The showcase location and schedule will be announced during the Conference.

This is a great opportunity to keep abreast of developments in the world of emissions data and to share your experiences with other emission inventory professionals from federal/state/local and international regulatory agencies, tribal governments, industry and academia. We think you will also enjoy being in Portland and hope you are able to visit some of its green spaces and natural wonders. We appreciate the support we have received from our colleagues at the Oregon Department of Environmental Quality (OR DEQ) in planning this Conference and look forward to seeing you at the Conference.

US EPA Conference Organizers
Emission Inventory and Analysis Group
Office of Air Quality Planning & Standards

Schedule at a Glance

Date/Time	Session	Room
Mon. June 2		
8:30 - 5:00	EIS Gateway/EIS Reporting Format	Multnomah
8:30 - 5:00	NMIM/MOVES	Holladay
9:00 - 500	GHG Inventory 101/GHG Inventory Tool	Broad/Weid/Hals
8:30 - 5:00	Intro to Emissions Inventory Part 1/2	Oregon
Tue. June 3		
9:00 - 12:00	Welcome US EPA NEI Status Report *Break* Panel: Evolving Regulatory Uses of the Inventory Industrial Perspectives - • Local-scale (PM NAAQS) • National-scale (residual risk air toxics) • Global-scale (greenhouse gases)	Multnomah/Holladay
	Lunch (On Your Own)	
1:30 - 2:45	- Session 1 – Innovative EI Development Methods	Multnomah
	- Session 2 –Stationary Source	Holladay
	- Session 3 – Global/International Issues	Broad/Weid/Hals
2:45 - 3:15	**Break**	
3:15 - 4:55	- Session 1 - Continues	Multnomah
	- Session 2 - Continues	Holladay
	- Session 3 - Continues	Broad/Weid/Hals
6:00 - 8:00	- Poster Session and Exhibitors' Reception	Willamette Ballroom
Wed. June 4		
8:30 - 9:45	- Session 4 – Emission Factors	Multnomah
	- Session 5 – Greenhouse Gases	Holladay
	- Session 6 – EI Preparation for Modeling	Broad/Weid/Hals
9:45 - 10:15	**Break**	
10:15 - 11:55	- Session 4 - Continues	Multnomah
	- Session 5 - Continues	Holladay
	- Session 6 - Continues	Broad/Weid/Hals
	Lunch (On Your Own)	
1:30 - 2:45	- Session 6 – EI Preparation for Modeling	Broad/Weid/Hals
	- Session 7 – Air Toxics	Multnomah
	- Session 8 – Tools – Emissions Data Sharing & Assessment	Holladay
2:45 - 3:15	**Break**	
3:15 - 4:55	- Session 7 - Continues	Multnomah
	- Session 8 - Continues	Holladay
	- Session 9 – Emissions Inventory Data Analysis	Broad/Weid/Hals

Date/Time	Schedule at a Glance (con't)	
Date/Time	**Session**	**Room**
Thurs. June 5		
8:30 - 9:45	- Session 10 - EI Validation and Quality Assurance	Multnomah
	- Session 11 – Mobile Sources	Holladay
	- Session 12 – PM: Agriculture & Ammonia; Managed Burning & Wildfires	Broad/Weid/Hals
9:45 - 10:15	**Break**	
10:15 - 11:55	- Session 10 - Continues	Multnomah
	- Session 11 - Continues	Holladay
	- Session 12 - Continues	Broad/Weid/Hals
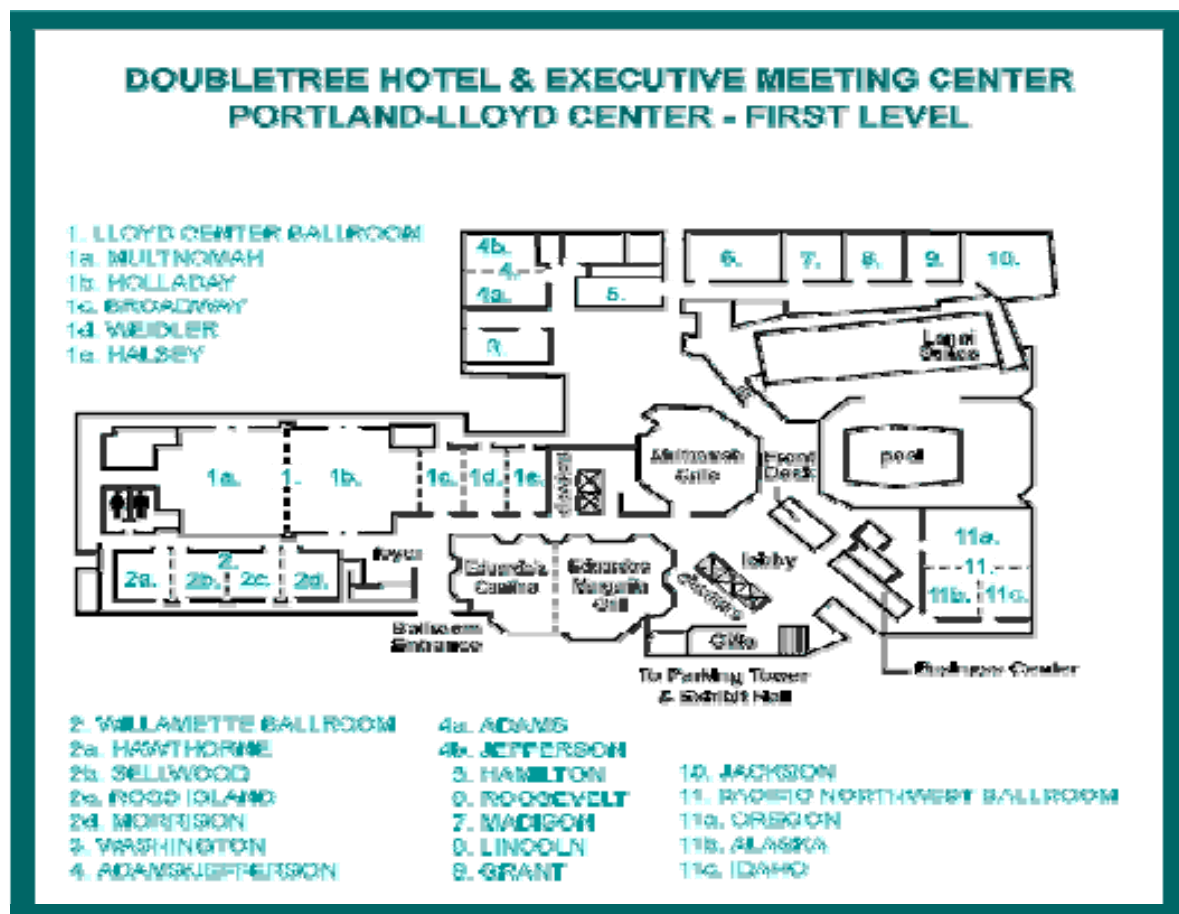
TRAINING SCHEDULE

The training will be delivered in three different ways:
- By live web cast prior to Conference (*pre-registration required*)
- On-site at Conference location (*pre-registration required*)
- Self-paced study via web available resources (registration not required)

These choices and the list of Courses are described below. The web cast courses are scheduled to occur in advance of the Conference. All of the on-site courses will occur on Monday June 2, 2008. As you consider your choices, please notice that several of the on-site training courses offer alternatives for self-paced study instead of attendance in-person. Such an option may allow you to participate in multiple training events – some on your own, and some in-person. Registration is not required if you choose to conduct a self-paced study.

WEB CAST TRAINING PRIOR TO CONFERENCE

Registrants for web cast training courses will be contacted by email to confirm the time for the web cast and to provide access instructions. Registration is available at: http://projects.pechan.com/epa/eic/register.cfm.

Water9
Instructor: Hillary Glover-Ward, US EPA
Wednesday April 30, 2008 - 1:00 – 4:00 pm EST

The WATER9 computer program is a tool that has been provided by EPA to facilitate environmental calculations. The Water9 model estimates VOC and toxic air pollutant emissions from industrial and municipal wastewater operations. This course provides the basics of what the WATER9 program is and how it works, but just as importantly; it allows the participant to interact with the leader and ask questions during and after the training sessions. It also provides ideas as to how the participant can obtain additional instruction in the operation of WATER9. At the conclusion of this course, participants will be able to:

· Explain what WATER9 is and how it works
· Load a WATER9 project file and examine the calculations
· Change the project file and examine the effect of those changes
· Understand how to create WATER9 projects
· Learn to set up recycle flows of solids and water
· Learn to split the flow of wastewater among multiple units
· Learn how to model a batch process

An Adobe Flash version of the training can also be found at the following web address: http://www.epa.gov/ttn/chief/software/water/water9_3/training.html

SPECIATE – EPA's Database of Speciated Emission Profiles
Instructor: Lee Beck, US EPA
Wednesday May 7, 2008 – 1:00 – 4:00 pm EST

This course will provide an overview of EPA's Database of Speciated Emission Profiles. SPECIATE is the U.S. Environmental Protection Agency's repository of total organic compound (TOC) and particulate matter (PM) speciation profiles for emissions from air pollution sources. The database has recently been updated and an associated report has been released. Among the many uses of speciation data, these source profiles are used to:

> 1) create speciated emissions inventories for regional haze, particulate matter with an aerodynamic diameter less than 2.5 micrometers ($PM_{2.5}$), and ozone (O_3) air quality modeling;
> 2) estimate hazardous and toxic air pollutant emissions from total PM and TOC primary emissions; and
> 3) provide input to chemical mass balance (CMB) receptor models.

Participants will learn how to access SPECIATE from the EPA website and will be given examples of data sets that can be generated using the database. Questions will be answered during the course, by follow-up email, or by phone contact.
The SPECIATE database, documentation, and related data can be accessed at
http://www.epa.gov/ttn/chief/software/speciate/index.html

WebFIRE and the Electronic Reporting Tool (ERT)
Instructor: Ron Myers & Mike Ciolek, US EPA
Wednesday May 14, 2008 – 1:00 – 4:00 pm EST

The US EPA's Electronic Reporting Tool (ERT) and WebFIRE are critical program components in the stakeholder-centered process for developing emissions factors. The ERT is a tool that replaces the time-intensive manual preparation and transcription of stationary source emissions test plans and reports currently performed by contractors for emissions sources and the time-intensive manual quality assurance evaluations and documentation performed by State agencies. Quality assured source emissions test reports provide the foundation for calculation of the average emissions factors that reside in WebFIRE and for the determination of the quality ratings assigned to the emissions factors. The ERT includes an export routine to WebFIRE where the critical information needed to calculate the emissions factors resides. WebFIRE will allow more frequent updates, easier access, and greater transparency for the Agency's emissions factors development and application process. This course provides the basics of what the ERT program is, how it works, potential use benefits to the source test contractor and state/local/tribal agencies and future benefits to the inventory community. The course will also provide information on the future changes that are planned for WebFIRE that will allow the inventory community to obtain as much supporting information on the emissions factors as they wish. At the conclusion of this course, participants will be able to:

- Explain what the ERT is and how it works
- Generate, review, assess and comment on an ERT test plan
- Load a completed ERT project file and examine the calculations
- Understand how to create ERT projects
- Learn to locate emissions factors in WebFIRE

- Learn to find supplementary information associated with WebFIRE emissions factors
- Learn about future enhancements to WebFIRE that will allow users to tailor emissions factors to their specific situation

The ERT application can be found at http://www.epa.gov/ttn/chief/ert/ert_tool.html. More information about WebFIRE is located at: http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main.

ON-SITE TRAINING

Monday, June 2, 2008   **8:30 – 5:00 pm**

Courses will be offered on a first come, first serve basis. Pre-registration is required. Registered participants will be notified of class locations upon check-in.

The EIS Gateway: Your Entry into the Emissions Inventory System
Instructor: Martin Husk, US EPA
Monday June 2, 2008 - Morning

The EPA has undertaken a project to redefine how the US EPA National Emissions Inventory is developed. Part of this effort involves the development of the Emissions Inventory System (EIS), one component of which will be launched this October. Called the EIS Gateway, this portion of the system will provide users with direct access into the EIS database. The purpose of this course is to provide a general introduction to the Gateway. Attendees will receive an overview of the functionality available to them and learn how to use it as part of the new EIS process. For more information on the project to develop the EIS, visit the project web site at http://www.epa.gov/ttn/chief/net/eis.html. Attendance priority is given to State, Local and Tribal staff.

An Introduction to the EIS Reporting Format
Instructor: Martin Husk, US EPA
Monday June 2, 2008 - Afternoon

To support the Emissions Inventory System (EIS) process, a new reporting format was developed for the submission of emissions inventory data. The new process will no longer rely on the NIF format, but will instead use an Extensible Markup Language (XML) file format. The purpose of this course is to introduce attendees to the new XML reporting format, and provide them with a non-technical understanding of XML and how it will be used in the EIS process. It is geared toward the State, Local and Tribal agency staff that develops emissions inventories. Attendance priority is given to State, Local and Tribal staff.

Prior to attending the course, you are encouraged to learn more about the project to develop the EIS by visiting http://www.epa.gov/ttn/chief/net/eis.html. For specific information on how to submit XML data through the EIS, please visit the website http://www.epa.gov/ttn/chief/net/neip/section_9.pdf. For specific information on the EIS XML schema, please visit http://www.epa.gov/ttn/chief/net/neip/appendix_2.pdf.

National Mobile Inventory Model (NMIM)
Instructor: Harvey Michaels, US EPA
Monday June 2, 2008 - Morning

EPA's NMIM is an emissions modeling system that generates county inventories using MOBILE6, NONROAD, and a database of county-level inputs. Participants will learn how to use NMIM on a Windows PC and how to work with the output. In addition to the basics, we plan to cover NMIM's fleet modeling and diesel retrofit capability. As time allows and participant interest indicates, we will also cover other topics, such as modifying the NMIM County Database using simple MySQL commands. The course will be organized around hands-on exercises, but persons without computers are also welcome. Organizations are asked to limit the number of students sent to allow space for the maximum number of individual organizations to attend. Class size will be limited to 50 students with laptop computers and additional students without laptops.

Computers will not be provided, so **PARTICIPANTS MUST BRING THEIR OWN LAPTOPS** running Windows 2000 or newer operating system, but please note that we have not yet tested NMIM on Windows Vista. Minimum configuration is 256 Mb of RAM and three free gigabytes of hard drive space. Participants must have NMIM and MySQL Query Browser installed and running on their machines prior to the course. Please download the latest installation package, which includes all needed software, from http://www.epa.gov/otaq/nmim.htm.

Introduction to EPA's Motor Vehicle Emission Simulator (MOVES)
Instructor: David Brzezinski, US EPA
Monday, June 2, 2008 – Afternoon

EPA's MOVES is an emissions modeling system that will eventually replace MOBILE6 and NONROAD as EPA's tool for estimating air pollution emissions from mobile sources. A demonstration version of the model for criteria pollutants, including draft estimates for greenhouse gases and energy consumption from highway vehicles is now available. Participants will learn how to use the highway vehicle demonstration version of MOVES on a Windows PC, including how to create a Run Specification, how to run the model, and how to work with model output. The course will be organized around hands-on exercises, but persons without computers are also welcome. Organizations are asked to limit the number of students sent to allow space for the maximum number of individual organizations to attend. Class size will be limited to 50 students with laptop computers and additional students without laptops.

Computers will not be provided, so **PARTICIPANTS MUST BRING THEIR OWN LAPTOPS** running Windows 2000 or newer operating systems (we have NOT yet tested MOVES with Windows Vista), with a CD drive, a minimum of 256 Mb of RAM, and a minimum of five free gigabytes of hard drive space. Participants must have the demonstration version of MOVES and the MySQL Browser software pre-installed and running on their machines prior to the course. This version of the model, including the browser, is available now on the EPA web site at http://www.epa.gov/otaq/ngm.htm.

Greenhouse Gases Inventory 101
Instructor: Andrea Denny and Leif Hockstad, US EPA
Monday June 2, 2008 – Morning (9am-12pm)

This lecture-style course will provide an introduction to greenhouse gas inventories. Topics will include:
- overview of GHG emissions sources in the US
- purpose and scope of a GHG inventory,
- differences between traditional criteria pollutant inventories and GHG inventories
- choosing a baseline year
- quantification approaches (top-down vs. bottom up)
- available software and methodologies
- differences between inventories and registries
- certification and reporting protocols
- comparability
- level of effort

Self-paced Alternative:
A Web-based alternative is available and allows participants to preview this course prior to attendance, or provides the option of remote self-paced training, in lieu of on-site training.
A similar 90 minute web-based training was recorded in October 2007. While aimed at state and local governments, much of the information is broadly applicable.
Access the training at: http://securestaging.icfconsulting.com/Inventory101
To access this site, the user name is greenhouse and the password is gases. Please follow the instructions for viewing: Session 1: Creating an Inventory.

Using EPA's State GHG Inventory Tool
Instructor: Andrea Denny, US EPA
Monday, June 2, 2008 – Afternoon

EPA's State Inventory Tool (SIT) is an interactive Excel-based suite of tools that assists with the development of a state-level greenhouse gas emission inventory. This detailed training for the SIT modules includes utilization of state data to assess GHG emissions by source and sector. This is a hands-on training where attendees enter data and complete sample reports along with the instructor on their own laptops. **ATTENDEES MUST BRING LAPTOPS. Laptops must be equipped with Microsoft Office software – Excel**. The course will cover software infrastructure, data sources, data anomalies, and additional tools and protocols that can be used to supplement inventory results (e.g. Portfolio Manager, Clean Air Climate Protection Software, etc).
Class Size is limited to 25. Attendance priority is given to state government staff.

Self-paced Alternative:
A Web-based alternative is available and allows participants to preview this course prior to attendance, or provides the option of remote self-paced training, in lieu of on-site training.
A similar 90 minute web-based training was recorded in December 2007.
Access the training at: http://securestaging.icfconsulting.com/Inventory101 To access this site, the user name is greenhouse and the password is gases. Please follow the instructions for viewing: Session 3: State Inventory Tool (SIT) Training Session.

Introduction to Emission Inventories
Instructor: Anne Pope, US EPA
Monday, June 2, 2008

This course is delivered in two separate modules – an overview in the morning, and more specific emission estimation exercises in the afternoon. Prior to class, students are strongly encouraged to review the following three training courses available on-line:
1) Introduction to Emission Inventories, APTI Course 419A, October 2004, located at http://epa.gov/air/oaqps/eog/course419a/index.html
2) Preparation of Fine Particle Emission Inventories, APTI Course 419B, September 2004, located at http://www.epa.gov/air/oaqps/eog/course419b/index.html and
3) Introduction to Emission Inventories, May 2007, located at http://www.epa.gov/ttn/chief/conference/ei16/index.html#training.

ATTENDEES MUST BRING LAPTOPS. Laptops must be equipped with Microsoft Office software - ACCESS, Excel, Word, and PowerPoint, and a CD reader. Prior to class attendance, to ensure that laptops can be successfully loaded with course materials, students should download the on-site course materials from the 2008 Emissions Inventory Conference site at http://www.epa.gov/ttn/chief/conference/ei17/index.html These materials will be made available at the website two weeks prior to the Conference.

Introduction to Emission Inventories Part 1: Overview
Monday, June 2, 2008 – Morning

This hands-on Course introduces students to planning and developing air emission inventories. The morning session will include the following topics:
- uses of emissions inventories
- pollutants
- source categories
- modeling parameters in emission inventories
- emission inventory compilation

Self-paced Alternative
As an alternative to attending the morning overview session, participants should at a minimum view on their own, the training course reference –
Introduction to Emission Inventories, May 2007, located at
http://www.epa.gov/ttn/chief/conference/ei16/index.html#training.
A fuller self-paced study will include also viewing the training course references –
Introduction to Emission Inventories, APTI Course 419A, October 2004, located at
http://epa.gov/air/oaqps/eog/course419a/index.html and
Preparation of Fine Particle Emission Inventories, APTI Course 419B, September 2004, located at http://www.epa.gov/air/oaqps/eog/course419b/index.html .

Introduction to Emission Inventories Part 2: Emission estimation and team exercises
Monday, June 2, 2008 – Afternoon

The afternoon session continues this hands-on course and case studies will be offered to provide more specific discussion and exercises for calculating emissions from point and non-point sources. The procedures for calculating emissions from mobile sources are covered in other training courses.

In addition to this basic instruction module, we have many documents that discuss in detail the development and maintenance of an emission inventory, and the details of estimating emissions from many specific stationary and nonroad mobile source categories. These materials are available at the following web link and are recommended as more specific references for emissions data developers - http://www.epa.gov/ttn/chief/eiip/techreport/ .

Poster Session and Exhibitors' Reception

Tuesday, June 3, 2008   **6:00 - 8:00 pm**

"Projected Growth of Black Carbon Emissions during 2000s over Tropical Indian Region Using GIS Technique", S. K. Sahu and G. Beig

"Quality Data - When Did Precision Replace Accuracy?" D. Leask

"Integration of Vehicle Activity into Emissions Estimation Based on On-Board Measurements for Diesel Light-Duty Vehicles", M. C. Coelho, H. Zhai, H. C. Frey, N. M. Rouphail, and L. Pelkmans

"A Methodology to Constrain the Potential Source Strength of Various Soil Dust Sources Contributing to Atmospheric PM_{10} Concentrations in Europe", H. Denier van der Gon, E. Hendriks, M. Schaap, and A. Visschedijk

"Identifying Recoverable Waste Energy Sources Through Existing Emission Inventory Parameters", J. Smith and R. Munson

"The EIS Gateway", M. Husk

"High Resolution on the High Seas (Part A): The Unprecedented Detail of the 2005-2006 British Columbia Ocean-Going Vessel Emissions Inventory", R. Bryant, B. McEwen, E. Hou, S. Sidi, R. Quan and A. Green

"Environmental Knowledge and Assessment Tool (EKAT)", T. Boguski, R. Green, L. Erickson, E. Keck and J. Fredkin

"Polycyclic Aromatic Hydrocarbon Distribution in Central India", S. Sharma and K.S. Patel

"Characteristics of C2-C5 Hydrocarbon and Monoaromatic Compounds in the Air of Urban Raipur", S. Chhattisgarh, S. Sharma and K.S. Patel

"Assessment of Impact of Ship Emissions Over the Summertime Mediterranean", E. Marmer, E. Vignati, B. Langmann, F. Dentener, J. Hjorth, K. Velchev, F. Cavalli and J. van Aardenne

"Developing a Web-Based CALPUFF Dispersion Model-Ready Air Emission Inventory", K. O'Neill, R. Chapman, D. Chadder; R. Mintz and R. Barrett

"Minerals Management Service Gulf of Mexico Emissions Inventories", H. Ensz, D.Wilson, R. Oommen, and R. Billings

"On-Road Transport Emissions in the Metropolitan Area of Buenos Aires, Argentina", D. Gomez, L., Dawidowski and A. D'Angiola

"Development of an Ammonia Emission Inventory for the San Francisco Bay Area", E. K. Gilliland, D. C. Sullivan and S. B. Reid

"Steriliser Emissions Inventory for Retrospective Health Risk Assessment Modeling in Australia", D. Rollings

"Agricultural Particulate Matter Emissions in the Czech Republic", H. Hnilicova and P. Hnilica

"Emission Trends of Selected Pollutants in the Czech Republic", J. Habonova, H. Hnilicova, D. Vacha and R. Srnensky

Poster Session and Exhibitors' Reception

Tuesday, June 3, 2008   **6:00 - 8:00 pm**

"Project Level Mobile Source Air Toxics Analysis: Loop- 12 Case Study in the Dallas Fort-Worth, Texas Region", C. Klaus, M. Venugopal, K. Yu and S. K. Park

"Development of an Air Emission Inventory for the Western Arizona Sonora Border Air Quality Study (WASBAQS) Part 1 - U.S. Emission Inventory", G. Mansell, J. Grant, A. Bar-Ilan and A. K. Pollack

"Combining Software Tools to Post-Process Output from the Smoke Emissions Model", P. Barickman

"Emissions Processing Methodology for the New GEM-MACH Model", M. Sassi, L. P. Crevier, S. Ménard, G. Morneau, D. Niemi, P. Makar, W. Gong, and D. Fox

"Aerosol Emissions from Commercial Shipping", D. Lack

"Recent Updates to the Smoke Modeling System and its Applications", B. H. Baek, Z. Adelman, A. Eyth, S. Arunachalam, A. Hanna, M. Houyoux, and M. Strum

"Development of an Emission Database in XML and its Integration with a Geographic Information System into an Atmospheric Chemistry Model in Mexico", A. Ortinez

"Emission Processing or Long-Term Regional Air Quality Modeling", C. Hogrefe, Jia-yeong ku, G. Sistla, and E. Zalewsky

"Detailed Greenhouse Gas Emissions Data for Global Economic Modeling", H. Perez, S. Rose., S. Finn, E. Scheele, J. Mangino, K. Delhotal and J. Siedenburg)

"Speciate 4.1 - EPA's Database of Speciated Emission Profiles", D. Mobley, L. Beck, Y. Hsu and F. Divita, Jr.

"Comparing Area Burned Estimates for the Continental United States in Support of the National Emissions Inventory", A. Soja, J. Al-Saadi, G. Pouliot, L. Giglio, C. Wiedemyer, S. Raffuse, X. Zhang, S. Kondragunta, T. Pierce, B. Pierce, T. Pace, C. Kittaka and J. Szykman

"Comparison of Emission Inventories and Ambient Concentration Projections as Tools in Evaluating Highway Project Impacts", K. Black

"Comparison of Biomass Burning Emission Estimates", G. Pouliot and T. Pierce

"An Analysis of Time-Series Emission Inventory vs. Discrete Inventory Years", D. Derby

"Emissions Modeling of Specific Highly Reactive Volatile Organic Compounds (HRVOC) in the Houston-Galveston-Brazoria Ozone Nonattainment Area", R. Thomas, J. Smith, M. Jones, J. MacKay and J. Jarvie

"Emission Inventory for Medellin City (Colombia)", M. V. Toro, J. Serna, J. C. Gomez and C. Sanchez

"Using Google Earth to Display Emissions Data", J. Drukenbrod

"Benefits and Overview of the Electronic Reporting Tool (ERT)", P. Baker

"Satellite Based Wildland Fire Emission Inventories", S. Urbanski, B. Nordgren, and W. Min Hao

Poster Session and Exhibitors' Reception

Tuesday, June 3, 2008   **6:00 - 8:00 pm**

"Alternatives and Tools for Motor Vehicle Emission Estimations in Mexican Cities", G. Echániz-Pellicer, V. Garibay-Bravo and J. A. Aguilar-Gómez,

"Determination of Biogenic Emissions from Aircraft Measurements during Four Campaigns and Comparison with Biogenic Emission Inventories", C. Warneke, S. McKeen, J.A. de Gouw, J. Brioude, H. Stark, M.K. Trainer, F.C. Fehsenfeld, C. Wiedinmyer, A.B. Guenther and L. Del Negro

"Management System for Air Emissions – SIGEA – the Search for Corporate Sustainability", A. Martins, V. Schmall and R. Oliveira

"A Top-Down Compilation of State and Provincial Greenhouse Gas Emission Summaries and Projections: 1990, 2005, and 2020", L. Williams, B. Strode, S. Roe, T. Peterson and R. Strait

"High Resolution Emissions Inventories and the Carbon Cycle", G. Pétron, A. Andrews, G. Frost, A. Jacobson, W. Peters and P. Tans

"Climate Change Emissions Inventories for Companies Reporting to Registries and Projects", D. Millar, M. Grossman and B. T. O'Neil

Tuesday, June 3, 2008

Session 1. Innovative Emission Inventory   Chairs: Madonna Narvaez, US EPA
          Development Methods   **Wayne Boulton, RWDI**

1:30   "Prompt Indicator of Trends in Australian Greenhouse Gas Emissions," G. Anderson and
          H. Saddler

1:55   "New Developments in the Emission Inventory of The Netherlands," P. Coenen, D. Heslinga and
          J. Hulskotte

2:20   "Data Management and Emissions for a Port Landside Emission Inventory for the Vancouver
          Fraser Port Authority," B. McEwen and G. Olszewski

2:45   Break

3:15   "Using Satellite Imagery for an Inventory of Erodible Vacant Land," F. D. Hall and W. F. Kemner

3:40   "Hourly Biomass Burning Emissions Inventory Derived from Satellite Data," X. Zhang and
          S. Kondragunta

4:05   "Webmapping Solutions for the Development of Emission Inventory Models," V. Gois, J. Neves
          and L. Nogueira

4:30   "Detailed Operational Data as a Means to Improve Air Emissions Management," A. Martins,
          V. Schmall, R. Oliveria, B. Pikman and K. Weiss

Session 2. Stationary Sources   Chairs: **Lynn Barnes, SC DHEQ**
                                                        Chris Swab, OR DEQ

1:30   "Emissions of SO2, NOx, CO2 and Hydrocarbons from Industrial Sources in Houston Measured
          by the NOAA WP-3," R. A. Washenfelder, T. B. Ryerson, E. L. Atlas, C. A. Brock,
          G. J. Frost, J. S. Holloway, J. W. Peischi, S. M. Schauffler, M. Trainer and F. C. Fehsenfeld

1:55   "Quantification of Ethene Emissions from Petrochemical Industries in Houston, Texas: Large
          Disagreements with Emission Inventories," J.A. de Gouw, C. Warneke, S. te Lintel Hekkert,
          J. S. Holloway, D. D. Parrish, J. Peischl. T. B. Ryerson, J. Mellqvist, E. L. Atlas and A. Fried

2:20   "A Comprehensive Oil and Gas Emissions Inventory for the Denver-Julesburg Basin in
          Colorado," A. Bar-Ilan, R. Friesen, J. Grant and A. Pollack

2:45   Break

3:15   "New Methodology for Estimating Emissions from Residential Wood Combustion," R. Huntley,
          F. Divita, J. Van Bruggen and S. Colodner

3:40   "Revised Interpretation of Residential Wood Combustion Survey Data Resulting in Emissions
          Estimates Reductions," C. Swab, S. Otterson and J. Stocum

4:05   "Preparation of the 2005 Point Sources National Emissions Inventory," R. Oommen, D. Wilson
          and A. Pope

4:30   "Use of a PRTR Emission Inventory in Assessing the Benefits of Abatement Policies in Industry,"
          T. Pulles and W. Appleman

Tuesday, June 3, 2008

Session 3. Global/International Issues   **Chairs: Paulette Middleton, GEIA Ctr**
                                                              Orlando Carbrera, CEC

1:30   "The GEIA-ACCNR Web Portal on Emissions," C. Granier, A. Guenther, P. Middleton and
              A. Mieville

1:55   "Air Emissions Inventory Data in Europe: New Perspectives," M. Adams, S. Cryan and
              A. Mourelatou

2:20   "Overview of the CEC's North American Pollutant Release and Transfer Register and Emissions
              Inventory Efforts," O. Cabrera-Rivera

2:45   Break

3:15   "An Inventory of Gases and Particles Emissions for the 1900-2000 Period," C. Grainer,
              C. Liousse, B. Guillaume, A. Mieville, J. M. Gregoire and F. Mouillot

3:40   "Development of High-Resolution Emissions Inventories from Motor Vehicles for City-Level
              Air Dispersion Modeling in China – A Case Study," H. Guo

4:05   "Panel: Local and Global Assessments – the Art and Science of Integrating Inventories,"

4:30   "Panel: continue

Wednesday June 4, 2008

Session 4. Emission Factors

Chairs: Roy Huntley, US EPA
Bob Betterton, WV DAQ

8:30   "Emission Factors for New Certified Residential Wood Heaters," J. E. Houck, L. Y. Pitzman and
P. Tiegs

8:55   "Emission Factors for Aged Uncertified Residential Cordwood Heaters," J. E. Houck,
L. Y. Pitzman and P. Tiegs

9:20   "Development of Emission Factors for Pulp & Paper Mill Sources," J. E. Pinkerton and
A. V. Someshwar

9:45   Break

10:15   "An Introduction to Chapter 16: 'Methods for Estimating Air Emissions from Chemical
Manufacturing Facilities'," A. Hatfield

10:40   "Determination of Emission Factors from Commercial Marine Vessels," E. Williams, B. Lerner,
P. Murphy, S. Herndon and M. Zahniser

11:05   "Determination of Urban VOC Emissions Ratios and Comparison with Inventories," C. Warneke,
J. A. de Gouw, P. D. Goldan, W. C. Kuster, J. S. Holloway, E. J. Williams, D. D. Parrish,
M. Trainer, F. C. Fehsendeld, S. Kato, E.L. Atlas, A. Baker and D. R. Blake

11:30   "African Combustion Emissions," C. Liousse, E. Assamoi, B. Guillaume, J. M. Gregoire,
H. Cachier, B. Guinot, R. Rosset, A. Konare, C. Granier and A. Mieville

Session 5. Greenhouse Gases

Chairs: Andrea Denny
Leif Hockstad

8:30   Panel: Corporate, state and municipal representatives will describe experiences and lesions
learned in creating a greenhouse gas inventory, including reasons for inventory development, data
availability and quality inventory uses, challenges and future plans. There will be ample time for
questions from the audience.

8:55   Panel: continue

9:20   Panel: continue

9:45   Break

10:15   "Improving the Transportation Component of   State Greenhouse Gas Inventories," J. Davies,
M. Grant and F. Gallivan

10:40   "Comparison of GHG Emissions Inventories with Different Reporting Protocols," G. Pelletier

11:05   "Double-Counting in Municipal Greenhouse Gas Emissions Inventories," L. M. Miller

11:30   "Realizing Residential Building Greenhouse Gas Emissions Reductions: The Case for a Web-
based Geospatial Building Performance and Social Marketing Tool," H. S. Knowles, III

Wednesday, June 4, 2008

Session 6. Emission Inventory Preparation for Modeling

Chairs: Marc Houyoux, US EPA
Rich Mason, US EPA

8:30   "High Resolution on the High Seas (Part B) – Generating an Hour-By-Hour Model-Ready Marine Emission Inventory," J. W. Boulton, M. Van Altena, D. Devine, M. Lepage, C. di Cenzo and A. Green

8:55   "Emissions Processing and Sensitivity Air Quality Modeling of Class 3 Marine Vessel SECA Emissions," R. Mason, P. Dolwick, E. Kinnee and M. Wilson

9:20   "An Approach for Preparing Gridded Inventories for Air Quality Modeling," Z. Adelman, L. Ran, A. Zubrow and T. Sfetsos

9:45   Break

10:15   "Ambient Temperature-Determined Estimation of Residential Wood Burning Emissions for the AIRPACT-3 Air Quality Forecasting System," J. Vaughan, S. Otterson, C. Swab, C. di Cenzo, C. Ramsdell and B. Lamb

10:40   "Development of an Air Emission Inventory for the Western Arizona Sonora Border AirQuality Study (WASBAQS) Part 2 – Mexico Emission Inventory," M. E. Wolf, P. G. Fields, G. Mansell, J. Grant, A. Bar-llan and A. K. Pollack

11:05   "Development of an Hourly Modeling Emissions Inventory from Several Sources of Regulatory Speciate Hourly Data for the Houston-Galveston-Brazoria Ozone Nonattainment Area," R. Thomas, M. Jones, B. Exum, D. Karp and J. MacKay

11:30   "Modeling of Columbia River Gorge Emissions," J. G. Wilkinson, C. Swab, U. Nopmongcol, E. Tai, C. Emery and P. Mairose

12:00   Lunch

1:30   "Development and Application of the High Elective Resolution Modeling Emission System (HERMES): A Multi-Pollutant High-Resolution (1km2-1hr) Emission Model for Spain," J. M. Baldasano, L P. Guereca, E. Lopez, S. Gasso, P. Jimenez-Guerrero

1:55   "Using SMOKE from the Emissions Modeling Framework," M. Houyoux, C. Allen, A. Beidler, A. Zubrow and R. Mason

2:20   "Improving Emission Projections for Stationary Sources," L. Chappell and A. Bollman

Session 7. Air Toxics

Chairs: Anne Pope, US EPA
Regi Oommen, ERG

1:30   "Air Toxics Analysis—Particularly Metals," K. Hagelstein and J. Heinze

1:55   "A Comparison of Toxicity-Weighted Emissions and Ambient Risk Calculations," R. Oommen, D. Dayton, J. Siwft, A. Pope, J. Hemby and M. Jones

2:20   "Estimating Background Concentrations for NATA02," J. Hemby, T. Palma, A. Pope, M. Strum, M. McCarthy and H. Hafner

2:45   Break

3:15   Panel: The Risk and Technology Review Process – A Collaborative Approach between the EPA, State/ Local agencies, and Industry.

The EPA's Risk and Technology Review (RTR) is an effort to evaluate risk from toxic air emissions after the application of control technology as required by the Clean Air Act (CAA). As part of this effort, the EPA's national emissions inventory (NEI) underwent a review and correction process. The reminder of this afternoon session will consist of a panel of speakers representing federal, state, and industrial perspectives who will describe their specific organizational roles in the RTR NEI review process, their collaboration with other organizations, and the challenges and successes. The panel will begin with the federal perspective.

3:40   Panel: continue (state agency perspective)

4:05   Panel: continue (sector approach - federal perspective)

4:30   Panel: continue (sector approach – industry perspective)

Session 8. Tools – Emissions Data Sharing & Assessment

Chairs: Martin Husk, US EPA
Mark Van Soestbergen, ICBE

1:30   "Aligning the Data Planets: The National Environment Exchange Network Connects Emissions Data," M. West

1:55   "The Air Emissions Inventory (AEI) Project: An Update on a Universal Schema," S. Rasmussen, D. Burling, P. Garvey and S. Dombrowski

2:20   "Development of a Commodity-based Fire Emissions Tracking System," M. Mavko and D. Randall

2:45   Break

3:15   "Recent Applications of the Control Strategy Tool (CoST) within the Emissions Modeling Framework," A. Eyth, D. D. Vecchio, D. Yang, D. Misenheimer, D. Weatherhead, L. Sorrels and S. Ehrhardt

3:40   "An Electronic Data Entry System for Point Sources," S. Ehrhardt

4:05   "Using Exchange Network and CDX Services: Key Steps for Exchanging Emissions Inventory Data," R. Chaudet, C. Freeman and C. Clark

4:30   "Emission Reduction Analysis Tool for Heavy Duty Diesel Engines," J. Wang and A. Booth

Session 9. Emission Inventory Data Analysis

Chairs: Linda Chappell, US EPA
Marc DesLauriers, Envr Canada

3:15   "Reactive and Non-Reactive Species of Nitrogen in Atmospheric Emission Inventories – A Review" S. Reis, M. Zhang, G. Lijie and M. Sutton

3:40   "Regional Haze Technical Analysis Using the Colorado Emissions Trace," C. Taipale

4:05   "Using WRAP Emissions Data Tools to Support Regional Haze Planning," J. Adlhoch

4:30   "Refining and Analyzing Emissions Data for Use in Regional Haze Planning," P. Fields and L. Gribovicz

Thursday June 5, 2008

Session 10. Emission Inventory and Quality Assurance

Chairs: Robert McConnell, US EPA
Sally Dombrowski, US EPA

8:30   "Evaluation of NOx Emissions in the Western US Using WRF-Chem Model Simulations and Satellite Observations," W. R. Barnard, S-W Kim, A. Heckle, G. Frost, A. Richter, J. Gleason, J. Burrows, S. McKeen, E-Y Hsie and M. Trainer

8:55   "Top-down Evaluation of Point Source NOx, SO2 and CO Emissions and Comparison to Inventories", G. J. Frost, T. B. Ryerson, M. Trainer, J. S. Holloway, J. W. Peischl and F. C. Fehsendeld

9:20   "Variability in Predicted Utility Emissions Using the Integrated Planning Model Under Different Assumption Sets," J. McDill

9:45   Break

10:15   "Determination of Biogenic Emissions from Aircraft Measurements During Fout Campaigns and Comparison with Biogenic Emission Inventories," C. Warneke, S. McKeen, J. A. de Gouw, J. Brioude, H. Stark, M. K. Trainer, F. C. Fehsenfeld, C. Wiedinmyer, A. B. Guenther and L. Del Negro

10:40   "Twenty-five Years of Continuous Sulphur Dioxide Emission Reduction in Europe," V. Vestreng, G. Myhre, H. Fagerli, S. Reis, and L. Tarrason,

11:05   "The Netherlands PRTR-System and Quality Control by the Public," C. W. M. van der Mass

11:30   "Using Air Quality Modeling to Improve Air Emission Inventories," V. Gois

Session 11. Mobile Sources

Chairs: Laurel Driver, US EPA
Joe Pedelty, US EPA

8:30   "Impact of Using Link-Level Emissions on Multi-Pollutant Air Quality Model Predictions at Regional and Local Scales," M. Strum, K. Wessom, S. Phillips, A. Pollack, S. Sheppard, M. Jimenez, A. Beidler, M. Wilson, D. Ensley, R. Cook, H. Michaels and D. Brzezinski

8:55   "EmiLink: Mobile Source Air Toxics Analysis Tool," C. Klaus, M. Venugopal, K. Yu and S-K Park

9:20   "Observational Evaluation of Mobile Source Emissions," G. Frost, S. McKeen, M. Trainer, K. Aikin, J. Peischl, T. Ryerson, J. Holloway, G. Petron, P. Tans and R. Harley

9:45   Break

10:15   "Update on MOVES by US EPA OTAQ," G. Dolce

10:40   "Intermodal Yard Activity and Emissions Evaluations," C. Lindhjem

11:05   "Improving the Spatial Allocation of Construction Equipment Emissions," S. Smeltzer

11:30   "Use of National Mobile Inventory Model (NMIM) for Photochemical Modeling Applications in Texas," C. Kite and J. MacKay

Session 12. Agriculture & Ammonia; Managed Burning & Wildfires

Chairs: Tom Pace, US EPA
Tom Moore, WRAP

8:30   "A New Inventory of Ammonia Emissions from Agricultural Sources In Canada," S. Bittman, S. C. Sheppard, S. M. Beaulieu and J. Ayres

8:55   "Animal Feeding Operations – National Air Emissions Monitoring Study," W. Schrock and A. Heber

9:20   "Ammonia Emissions from Dairies: Measurements and the Development of a Dairy Cow Emissions Model for CMAQ," B. Rumburg, J. Chen, G. H. Mount and B. Lamb

9:45   Break

10:15   "Impact of Fires on PM2.5 Air Quality," T. G. Pace, J. Drukenbrod, G. Pouliot and T. Pierce

10:40   "Development of Wildland Fire Emission Inventories for 2002-2006 and Sensitivity Analyses," S. M. Raffuse, D. C. Sullivan, L. R. Chinkin, E. A. Gilliland, N. Larkin, R. Solomon and T. Pace

11:05   "Development and Applications of Systems for Modeling Emissions and Smoke from Fires: The BlueSky Smoke Modeling Framework and SMARTFIRE," S. M. Raffuse, D. C. Sullivan, L. R. Chinkin, K. J. Craig, N. J. M. Wheeler, S. B. Reid, N. Larkin and R. Solomon

11:30   "Fire Emissions Inventories for Regional Haze Planning in the WRAP," D. M. Randall

Emissions Inventory Software Showcase

We are hosting an emissions inventory 'software showcase' for both private sector software developers and public entities to demonstrate their wares to Conference attendees. The following lists some of the expected participants and software that will be demonstrated. Demonstrations will be available throughout the day Tuesday and Wednesday. The showcase location and schedule will be announced during the Conference.

Software Showcase

SPECIATE Data Browser, E. H. Pechan & Associates

Google Earth Display for the National Emission Inventory, US EPA

Emissions Modeling Framework, US EPA

Environmental Knowledge and Assessment Tool (EKAT), Kansas State University

Control Strategy Tool and the Emissions Modeling Framework, University of North Carolina

Emissions Accountant, Mitchell Scientific

EIGIS-Emissions Inventories from the Ground Up, RWDI

Emissions Master, Mitchell Scientific

EIQ Data Entry Program, St Louis County, MO

ArcGIS Gridded Surrogate Tool, Sonoma Technology, Inc

Registration

To register for the conference, courses, and meetings, please complete the on-line registration form located on the conference registration web page at http://www.epa.gov/ttn/chief/conferences.html. If you cannot access the Conference Registration webpage, please contact E.H. Pechan and Associates, Inc. at 919-493-3144, ext. 119 or email at conference.ei@pechan.com. Space is on a first come, first served basis, via registration. Registration should be received no later than May 16, 2008. For additional information regarding registration, please contact Kim Paylor at (919) 541-5474.

Logistics

The conference will be held at the Doubletree Hotel Portland-Lloyd Center. A block of rooms is being held for conference attendees for the nights of June 1 – 5, 2008. To make your reservations, call 800-996-0510 or 503-281-6111 by May 12, 2008, the cut-off date to receive the room block rate of $106.00/night plus 12.50% tax for single and double occupancy. After this date, reservations are subject to space and rate availability. Please reference the "EPA Emission Inventory Conference" when making your reservation. Registration can also be made online via at: www.portlandlloydcenter.doubletree.com. Select your dates under "**Check Availability**", click "**GO**" and enter your group code which is: **EP4**. If you have further questions, please contact the ERG Conference registration line at 781-674-7374.